

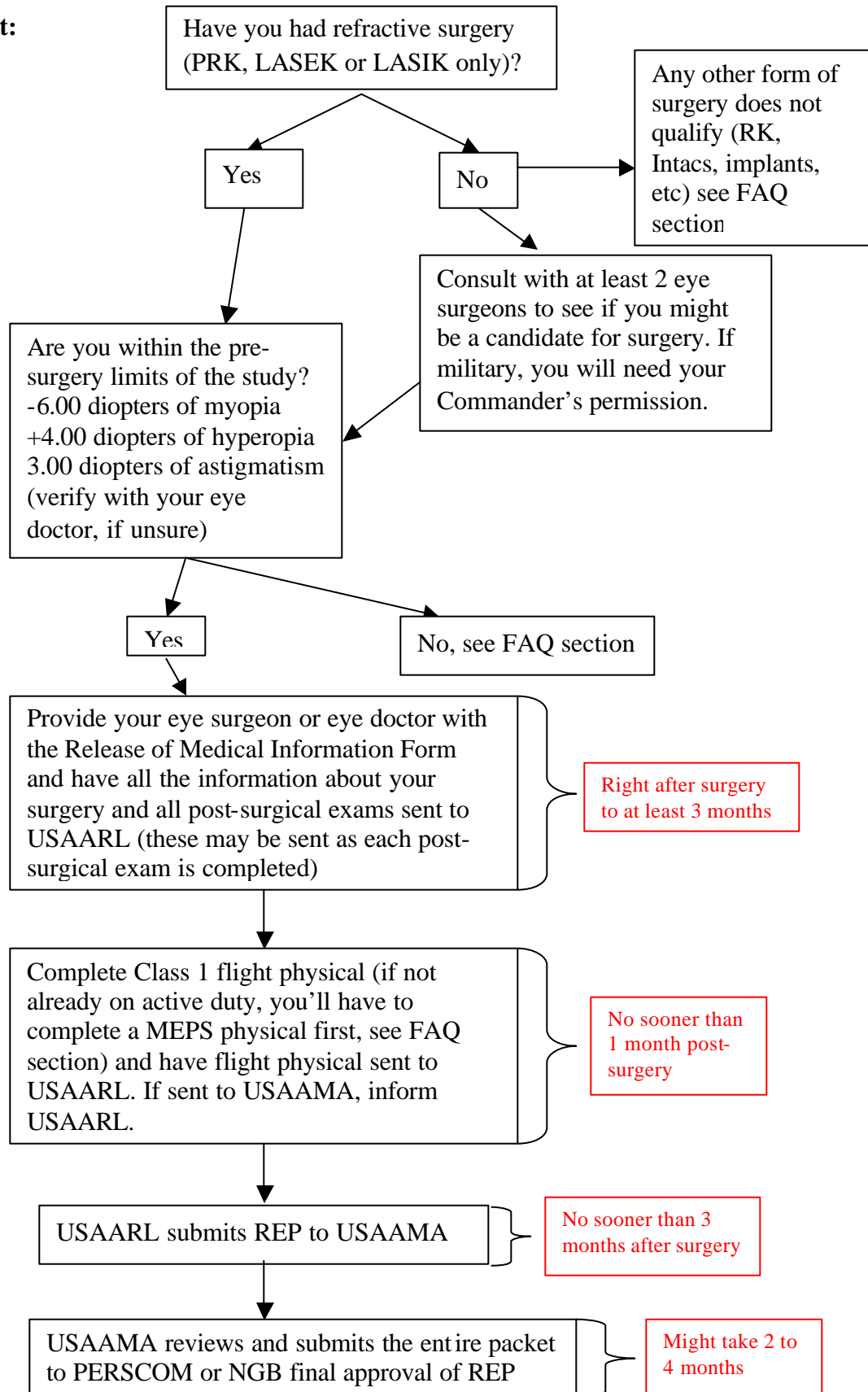
## **Flight School Applicants Refractive Surgery Fact Sheet**

**What:** Refractive surgery of any type is disqualifying for Army Aviation in accordance with Army Regulation 40-501. The purpose of this study is to determine whether refractive surgery should be considered as an option for Army Aviators, specifically new accessions to Army Aviation. The program is designed to screen and monitor individuals entering flight school who have had refractive surgery. The surgery is not provided as part of the study, therefore if you have not had surgery you are responsible for all the arrangements necessary to receive refractive surgery. Photorefractive keratectomy (PRK) and laser in-situ keratomileusis (LASIK) are the only two procedures considered for an exception to policy under this program. Laser Subepithelial Keratomileusis (LASEK) is considered as a variant of PRK and is therefore also accepted. It is recommended that you research general information about refractive surgery. The US Army Aeromedical Research Laboratory (USAARL) study was initiated in February 2001 and will continue until 100 PRK, 100 LASIK and 100 control subjects complete flight school. The estimated end of the study is fiscal year 2005. At that time, or sooner, a decision will be made as to whether LASIK should be considered for waiver in Army Aviation. PRK has already been approved for waiver for Army Aviation (Surgeon General Policy, 7 April 2003), however the initial clearance for flight school still requires the process described in this fact sheet.

**Who:** The study applies to individuals who meet all other requirements for flight school except for the presence of refractive surgery (PRK, LASEK or LASIK). Active duty, Reserve, National Guard, ROTC, Academy cadets, OCS candidates, and civilians are all eligible to submit for an exception to policy for refractive surgery. Qualifying for an exception to policy does NOT guarantee a flight school slot; it only verifies your medical eligibility to apply for flight school given the presence of a disqualifying procedure. You will need to coordinate with your eye surgeon and/or eye clinic to complete the visual exam forms needed for your exception to policy (see link to "Release of Medical Information" form). You will need to work with a flight surgeon to complete the Class 1 flight physical. Finally, you will need to work through the standard channels to apply to flight school with your recruiter and/or the Aviation branch.

**How, When and Where:** This section describes the steps you will need to complete to get an exception to policy for refractive surgery. The request for exception to policy (REP) is initiated by USAARL once we have all of your eye surgery and post-operative information and the Class 1 flight physical has been completed and submitted. The REP is submitted to the US Army Aeromedical Activity (USAAMA), which reviews the REP and all other medical information in the Class 1 flight physical. If acceptable, USAAMA will recommend approval of the REP and submit it to the waiver authority (either PERSCOM or NGB, depending on your status). Once the exception to policy is approved at the waiver authority, your medical qualification is provided to the board or agency working your flight school application and you are eligible to compete for the slot. A flow diagram is provided to help you work through the process of obtaining an exception to policy.

**Flowchart:**



**Points of Contact:**

**USAARL** – Research staff at 334-255-6875/6980 or Principal Investigator at 334-255-6876 or [refractive.surgery@se.amedd.army.mil](mailto:refractive.surgery@se.amedd.army.mil) or [www.usaarl.army.mil](http://www.usaarl.army.mil)

**USAAMA** – 334-255-7430

**Recruiting Command** [www.usarec.army.mil/hq/warrant/warrant.htm](http://www.usarec.army.mil/hq/warrant/warrant.htm)

Warrant Officer Flight Training Program (civilians, NG or Reservists) – 502-626-0467/1554

Active duty (Army, AF, Navy, Marine or Coast Guard) – 502-626-0458

Army Branch Officer applying to aviation needing a branch transfer –

<https://www.perscomline.army.mil/opavn/Branch%20Transfers.htm>

**Aviation Proponency** – <http://www-rucker.army.mil/ap/default.htm>  
or 334-255-3999

**FAQs:** After reviewing this section of frequently asked questions and the flowchart, if you still need further clarification, call the Refractive Surgery Research Team at USAARL.

**1. Questions about surgery and the eye information needed by USAARL**

**a. If I had a surgery other than PRK, LASEK or LASIK, can I still get an exception to policy?** No, the study only applies to the listed corneal refractive surgery procedures. If you have had radial keratotomy (RK), intrastromal corneal rings (Intacs) or any other type of refractive surgery, you will not qualify for an exception to policy.

**b. If I have NOT had refractive surgery yet, what do I do?** Follow the steps in the flowchart. You should consult at least 2 eye surgeons before deciding to get surgery. Do some research on the pros and cons of refractive surgery; this could be an on-line or reference book review.

**c. How can I verify if I meet the limits of the study?** Consult with your eye doctor. He/she will review your current eyeglass or contact lens prescription (if you have not had surgery) or records of your eyeglass or contact lens prescription before surgery (if you have already had surgery). Provide your eye doctor with the limits listed in the flowchart to help them in the review (-6.00 diopters myopia, +4.00 diopters hyperopia, or 3.00 diopters astigmatism).

**d. I'm outside the limits of the study, is it still possible to enter the study?**  
Yes. The limit is based on the correction that is programmed into the laser, not your eyeglass prescription, so you may actually be within the limits of the study. Your eye surgeon should be able to provide USAARL with the required laser information. We will review the laser records (or the planned correction the surgeon provides you) and determine whether you are within limits. If you are still outside the limits, we will require documentation of a dilated peripheral retinal examination from your eye doctor. The examination must be current (less than one year) and may be done before or after your

surgery. Note – some surgery centers complete this examination routinely, so the information may already be on file.

**e. What information do I need to provide about my surgery and where do I get it?** All the information needed is listed on the “Release of Medical Information” form. Provide the form to your eye surgeon and/or the eye doctor who is providing your vision care after surgery. You may have to submit multiple forms to get all of the required information.

**Surgical Information:** Your eye surgeon will need to fill out the information about the laser, the type of surgery and the amount of correction.

**Manifest Refraction:** We need three post-surgical refractions (measures of any residual prescription) and three visual acuities. This information can be a combination of examinations provided by your surgical center, your optometry office and your flight physical.

**Corneal Exam:** We will need verification that your cornea is clear of haze or any other post-surgical complication. Your eye doctor can provide this information.

**Corneal Topography:** This is the corneal map that shows the shape of your cornea after surgery. We must have a color copy of the map, either mailed or emailed to USAARL. FAX'd versions are not acceptable.

**Contrast Sensitivity:** This is a measure of your vision under low contrast conditions. Ask your eye doctor about availability of a contrast sensitivity or low contrast acuity test in your area. Examples of acceptable tests are:

VisTech Contrast Grating Test

Functional Acuity Contrast Test (F.A.C.T.)

StereoOptical contrast sensitivity

Bailey-Lovie 10% low contrast acuity chart

ETDRS low contrast acuity chart (different levels are available)

Mentor BVAT low contrast acuity chart

**f. What do I do if a contrast sensitivity or low contrast acuity test is not available in my area?** Your packet can be processed without this test, **if** the other eye information you provide indicates a good outcome from the surgery (specifically the corneal topography and corneal exam). The principal investigator for the refractive surgery study will make this determination and you will be informed if a contrast test is required in your case. Make sure your eye doctor notes on the form that these tests are not available to you.

## **2. Questions about the flight physical**

**a. How long do I have to wait after surgery to get a flight physical?** You should wait at least one month after surgery before starting your flight physical.

**b. I already took a flight physical before surgery; do I have to take another physical?** No, as long as your initial Class 1 flight physical is still valid (18 months). You

MUST repeat the eye exam portion of the flight physical after surgery, however. Coordinate this through your flight surgeon and the supporting eye clinic.

**c. I have not taken a general military entrance physical yet; do I have to do that first?** Yes, if you have not taken a MEPS, ROTC or other entrance physical, you will have to complete that physical before scheduling your flight physical. The entrance physicals require a 90-day waiting period after refractive surgery. Therefore you will have to wait **3 months** after surgery, take the entrance physical, and then you can schedule to take the flight physical. You will have to coordinate this with your recruiter.

**d. I still need to wear glasses after surgery; does that mean I will fail the flight physical?** No, as long as you meet the general entry standards for Class 1 which include 20/50 or better uncorrected visual acuity, no more than -1.50 diopters of myopia or +3.00 diopters of hyperopia or 1.00 diopters of astigmatism. If you are outside of these limits, however, you will not pass your flight physical. You should consult with your eye doctor and flight surgeon if this is the case.

### **3. Questions about the exception to policy process**

**a. How long does it take to get an exception to policy approved?** From the time USAARL submits the REP to USAAMA until its final approval by PERSCOM or NGB can take up to 4 months. If you are just getting surgery, you will have to add 3 months to that timeline (**7 months**). If you have not had an entrance physical, you may have to add more time (see 2c).

**b. What can I do to speed up the process?** Insure that all required paperwork is completed and sent directly to USAARL. This includes the eye information provided by your eye doctor and the flight physical completed by your flight surgeon. If you are National Guard, have your State Aviation Officer contact the NGB to verify with the waiver authority that they want you to become a pilot.

**c. What can I do while waiting for the exception to policy to be approved?** Complete your flight application so that when the exception to policy is approved at PERSCOM or NGB you will be able to compete for or obtain a flight school slot. Work with your recruiter or the Aviation Branch to complete this part of the process.

### **4. Questions about the study**

**a. What do I do when I get a flight school slot?** As soon as you have confirmation of a flight school slot, notify your point of contact at USAARL. You will be given instructions as to what to do upon arrival at Fort Rucker.

**b. If I have an exception to policy and a flight school slot, do I still need to participate in the USAARL research study?** Yes. One of the conditions of the exception to policy is that your vision continues to be monitored while you are in flight school.

**c. What do I have to do to qualify for the study?** You will need to complete a full vision screening at USAARL to verify your eligibility for the research study. This screening is usually completed before you get your flight physical at Fort Rucker. The best thing you can do is report to USAARL as soon as possible after getting to Fort Rucker and BEFORE you take your Fort Rucker flight physical.

**d. What will be expected of me as a participant in the study?** You will go through 4 vision test sessions at USAARL during the course of your flight training. One when you arrive at Fort Rucker to verify your vision before you start flight training and then again at 3 months, 6 months and just before graduation from flight school. Each session lasts about 1-¼ hours. Beyond that you will go through flight school just like any other applicant. Your flight grades will be recorded in your study file at the end of your flight training as part of the study analysis.

**e. What if while I'm in flight school a decision is made not to allow individuals with refractive surgery into flight school? Will I be kicked out?** Each individual will be considered on a case-by-case basis. If your vision is good and you are passing flight school, most likely you will be allowed to continue.

**f. When you have 100 PRK and 100 LASIK subjects enrolled in the study will you stop taking new applicants?** The study will remain open until 100 PRK and 100 LASIK subjects GRADUATE from flight school. At that time, or sooner, a recommendation will be made as to whether these procedures should be considered for waiver and what the requirements for entry into flight school should be.

**g. If I qualify for the study am I guaranteed I spot in flight school?** Qualifying for an exception to policy only waives your disqualification due to the refractive surgery. All other criteria in the flight physical and for flight school must still be met (including age, flight school eligibility, etc). If you are qualified in all other areas then you can compete for a slot in flight school against all other applicants. Being a participant in the study does not guarantee a slot. For more information about the requirements for flight school contact your Point of Contact for aviation recruiting, this information is above in the Point of Contact section, and your flight surgeon.

**Request for Release of Medical Records**  
**(completed by applicant and provided to eye care provider for completion)**

From: (enter your information)

Date:

To: (enter eye clinic information)

Subject: Request for records related to refractive surgery procedure

1. I am considering participation in a research study of refractive surgery in the military.  
Request a copy of records pertaining to my refractive surgery be provided to:

LTC Corina van de Pol, O.D., Ph.D.  
US Army Aeromedical Research Laboratory (Visual Science Branch)  
PO Box 620577  
Ft. Rucker, AL 36362

Tel: 334-255-6876  
FAX: 334-255-6873

2. The following information is needed:

Date of procedure  
Type of procedure (PRK or LASIK)  
Type of laser (brand name)  
Ablation parameters (size of ablation zone, microns of tissue removed, number of pulses, if available)  
Amount of correction (sphere, cylinder and axis)  
Pre-operative refraction and date (specify manifest or cycloplegic)  
Follow-up refractions with visual Acuties and dates (most current refraction and as many postoperative refractions as possible)  
Subjective assessment of corneal clarity (haze)  
Latest **post-operative** corneal topography in COLOR (instantaneous or tangential corneal maps)  
Contrast Sensitivity (or low contrast acuity)

3. Please contact Dr. van de Pol if you have any questions.

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Typed or Printed Name of Applicant

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Signature of Applicant

**Study applicant**

Last name: \_\_\_\_\_ First name: \_\_\_\_\_ Middle initial: \_\_\_\_\_

Date of Birth \_\_\_\_\_ Contact Tel. #: \_\_\_\_\_

**Eye Care Provider**

Name: \_\_\_\_\_ Date of report: \_\_\_\_\_

Clinic address & telephone: \_\_\_\_\_  
\_\_\_\_\_**Specific procedure details**Date of Procedure: \_\_\_\_\_ Type (circle one): PRK or LASIK  
Laser Used: (manufacturer) \_\_\_\_\_ (model #) \_\_\_\_\_

Ablation parameters (Complete below, or if available, attach copies of laser records )

OD: Size of ablation: \_\_\_\_\_ mm Tissue removed: \_\_\_\_\_ microns # of Pulses: \_\_\_\_\_

OS: Size of ablation: \_\_\_\_\_ mm Tissue removed: \_\_\_\_\_ microns # of Pulses: \_\_\_\_\_

Amount of correction programmed into laser

OD: \_\_\_\_\_ OS: \_\_\_\_\_

Pre-operative Refraction

OD: \_\_\_\_\_ OS: \_\_\_\_\_

Did the applicant require any enhancement procedures? Yes \_\_\_\_\_ No \_\_\_\_\_  
(If yes, please provide details, as above)**Follow-up examinations** (include most recent and 2 prior examinations)

Date	Refraction	Visual acuity	Corneal haze* (circle one)
	OD _____ OS _____	OD _____ OS _____	OD 0 1 2 3 4 OS 0 1 2 3 4
	OD _____ OS _____	OD _____ OS _____	OD 0 1 2 3 4 OS 0 1 2 3 4
	OD _____ OS _____	OD _____ OS _____	OD 0 1 2 3 4 OS 0 1 2 3 4

\* Haze 0-4 scale. 0=no haze, 1=trace, 2=minimal, 3=moderate, 4=iris details obscured.



**Corneal topography** (include copy of most recent corneal topography using the TANGENTIAL or INSTANTANEOUS map display option)

Topographer used: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_  
Model: \_\_\_\_\_  
Date of topographies: \_\_\_\_\_

**Contrast sensitivity** (attach copy of results, if available)

Test Used: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_  
Model: \_\_\_\_\_

Date of contrast test: \_\_\_\_\_

Test Conditions:

Room Lights ON (circle one)	Yes	No
Backlit Chart (circle one)	Yes	No
Distance to test _____ m		
% Contrast (if letters) _____ %		

Results:

OD \_\_\_\_\_

OS \_\_\_\_\_

Thank you for completing the information. Please return this form and supporting records to:

LTC Corina van de Pol, O.D., Ph.D.,  
US Army Aeromedical Research Laboratory  
Bldg 6901, PO Box 620577  
Ft. Rucker, AL 36362

Tel: (334) 255-6876  
Fax: (334) 255-6993